

# Partridge Creek Allotment Livestock Authorization Project

Draft Proposed Action

## Background Information:

Partridge Creek Allotment is located six miles north of the Town of Ash Fork, on the Williams Ranger District of the Kaibab National Forest (NF) (see Figure 1 below). The allotment is bordered by state and private lands to the north, west and south, and by the Double A Wild Burro Territory and the Double A Allotment to the east. Partridge Creek Allotment is approximately 24,985 acres in size with approximately 24,622 acres managed by the Kaibab NF and approximately 363 acres managed by private land owners. The major vegetation types found on the allotment are pinyon/juniper woodland (approximately 22,255 acres) and Colorado plateau/Great Basin grassland (approximately 2,367 acres).

*Table 1: Pastures with acres included within the Partridge Creek Allotment boundary.*

<b>Pastures</b>	<b>Acres*</b>
Big Aso	4,214
Big Aso Trap	16
Big Bill Trap	95
Bull Trap	900
Heifer**	3
House Traps	258
Indian	4,121
Little Aso	6,770
Murray Trap	158
South	6,530
West Trap	1,557
<b>Total</b>	<b>24,622</b>

\*Acreage reflects National Forest System acres only; all acres are approximate.

\*\*Heifer Pasture totals 714 acres, 711 of which fall outside of the Kaibab NF boundary and are not applicable to this analysis.

Livestock grazing has occurred intermittently on Partridge Creek Allotment since the late 1800s and was historically grazed during the spring and summer months. A 1995 grazing analysis resulted in the season of use changing from spring/summer to winter/spring. Since 1995 the maximum permitted head of livestock has been 320 cow/calf, with 95 head deferred until monitoring indicates conditions have improved, from November 1 through April 30, for a total of 1,904 animal unit months (AUMs). The 1995 Allotment Management Plan (AMP) describes the current grazing strategy as allowing the annual authorized number of livestock to split into 3-5 herds and simultaneously graze the main pastures (Indian, Big Aso, Little Aso, and South Pastures) during the non-growth period (November 1 through March 15). Pasture(s) grazed during the growth period (March 15-April 30) were to be deferred from grazing for at least two, and if possible three years. This strategy was and still is impractical and difficult to implement due to the suggested number of years a pasture(s) would be removed from livestock use for part of the grazing season, limiting the flexibility for livestock management on the allotment.

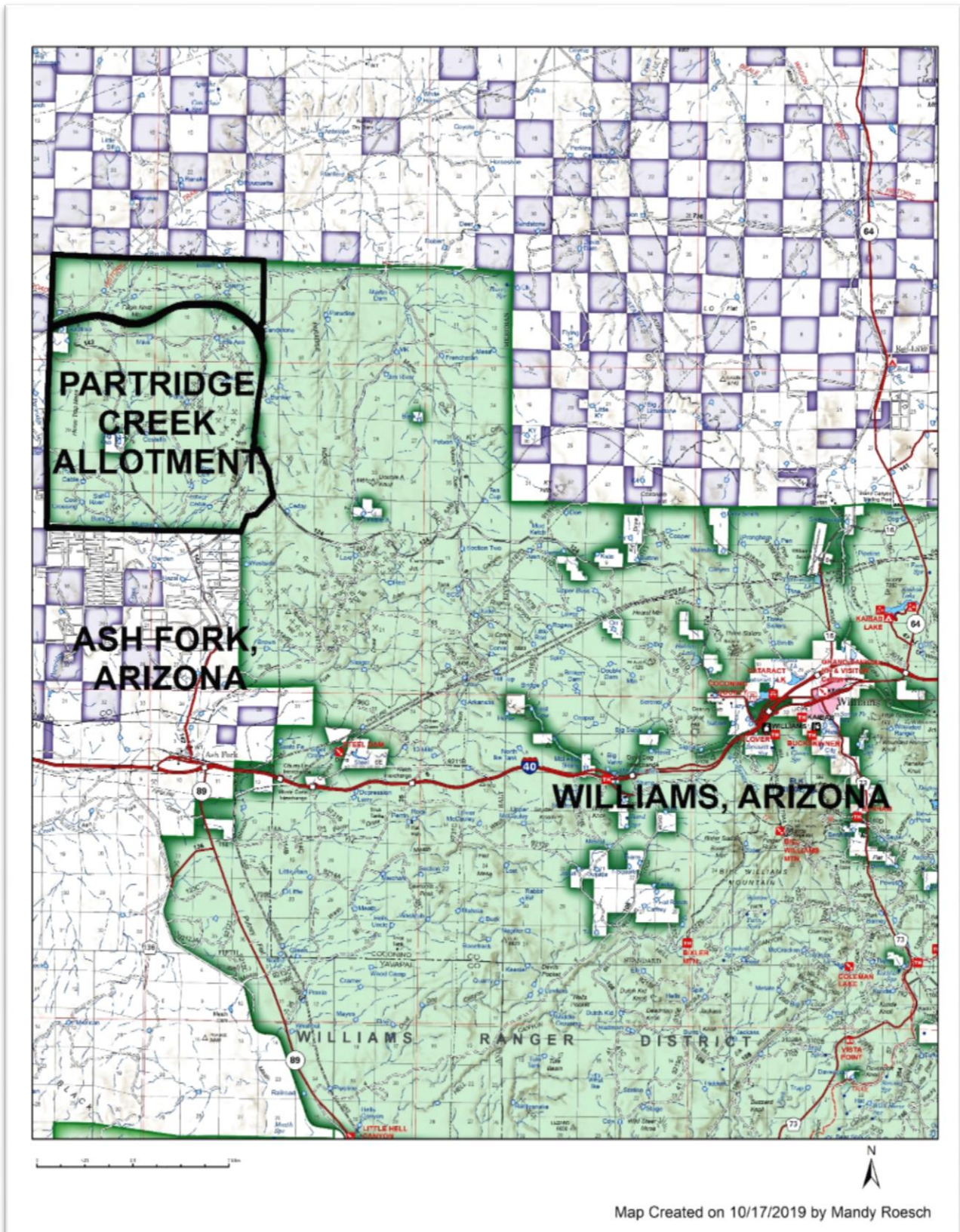


Figure 1: Vicinity map of Partridge Creek Allotment.

## Existing Conditions:

Twelve permanent, long-term range monitoring plots are located on the allotment. Each plot is approximately 100' x 300' in size and are read using the Pace-Frequency method. Plots were read in 2015 and for each plot ground cover was recorded at 600 points. This data was compared to Terrestrial Ecosystem Survey (TES) (1988) data and data collected in 1994. The data show that for basal vegetation (including litter over ½" deep) all twelve plots fall within the range established by the TES; and that for six out of eight plots read in both 2015 and 1994, basal vegetation increased between 2015 and 1994.

Table 2: Current soil conditions and acres on the allotment.

Soil Condition	Definition	Acres*
Satisfactory	Soil is functioning properly and normally; soil function is being sustained.	19,422
Impaired^	Reduction in ability of soil to function properly and normally.	3,390
Unsatisfactory^	Loss of soil function has occurred, degradation of vital soil functions.	1,850
<b>Total</b>		<b>24,662</b>

\*Acreage reflects National Forest System acres only; all acres are approximate.

^These soil condition classes will be further addressed in the analysis.

## Desired Conditions:

Desired Conditions for Livestock Grazing (Land and Resource Management Plan [LRMP] Pg. 68)

- There are opportunities to engage in ranching activities and graze livestock on NFS lands. These activities contribute to the stability and social, economic, and cultural aspects of rural communities.
- Grasses and forbs provide adequate forage for permitted livestock.
- Livestock use is consistent with other desired conditions.
- Allotment fencing allows for passage of animals susceptible to movement restrictions such as pronghorn.

Desired Conditions for Soils (LRMP Pg. 44)

- Soils provide for diverse native plant species. Vegetative ground cover is well distributed across the soil surface to promote nutrient cycling and water infiltration.
- Accelerated soil loss is minimal, especially on sensitive or highly erodible sites.
- Soils can readily absorb, store, and transmit water vertically and horizontally; accept, hold, and release nutrients; and resist erosion.
- Infiltration rates are good in TES soil units that are described as well drained and moderately well drained.
- Logs and other woody materials are distributed across the surface to maintain soil productivity.
- Biological soil crusts (mosses, lichens, algae, liverworts) are stable or increasing in semi-desert grasslands, desert, pinyon-juniper, and sagebrush communities.
- Soils are free from anthropogenic contaminants that could alter ecosystem integrity or affect public health.

## Partridge Creek Allotment Livestock Authorization Project Proposed Action

### Guidelines for Livestock Grazing (LRMP Pg. 69)

- Livestock management should favor the development of native cool season grasses and forbs.
- As grazing permits are waived back to the Kaibab NF, they should be evaluated for conversion to forage reserves to improve flexibility for restoring fire-adapted ecosystems and in response to other range and resource management needs.
- New construction and reconstruction of fences should have a barbless bottom wire that is at least 18 inches high.
- Annual operating instructions for livestock grazing permittees should ensure livestock numbers are balanced with capacity and address any relevant resource concerns (e.g. forage production, weeds, fawning habitat, soils, etc.)
- Post-fire grazing should not be authorized until Forest Service range staff confirms range readiness.

### Guidelines for Soils and Watershed Management (LRMP Pg. 44)

- Projects should incorporate the national best management practices for water quality management and include design features to protect and improve watershed condition.
- In disturbed areas, erosion control measures should be implemented to improve soil conditions.

### Purpose and Need:

The purpose of this project is to determine whether or not to authorize livestock grazing, and if so, how to implement this while ensuring livestock management activities are consistent with other resource desired conditions on National Forest System lands as stated in the Kaibab NF LRMP. There is a need to adjust the permitted season of use and grazing strategy to allow for increased flexibility for livestock management on the allotment. There is also a need to construct additional water facilities to increase flexibility in addressing future drought concerns. This project would allow the Forest Service and the livestock producer to use adaptive management for changing resource conditions or management objectives while being in compliance with Forest Service Policy (Forest Service Handbook (FSH) 2209.13 Chapter 90).

### Proposed Action:

Kaibab NF proposes to authorize livestock grazing on the Partridge Creek Allotment under the parameters identified in Table 3 below.

*Table 3 : Proposed specifications for livestock authorization on Partridge Creek Allotment.*

Permitted Animal Unit Months (AUMs)	Up to 1,904
Season of Use	October 15-May 31
Permitted Number of Head*	252 cattle for full season of use
Grazing System	Continuous, deferred rotation, rest rotation or a combination of any of these
Forage Utilization Guideline	Conservative level of utilization (30-40%)
Seasonal Utilization Guideline	Conservative level of seasonal utilization (30-40%)
Expansion of Holding Facility	Approximately 1 mile of new fence construction expanding the existing holding facility by approximately 100 acres.
New Pipeline Construction	Approximately 2 miles of buried OR surface pipeline

## Partridge Creek Allotment Livestock Authorization Project Proposed Action

Permitted Animal Unit Months (AUMs)	Up to 1,904
New Troughs	3 new troughs located in South Pasture
New Earthen Stock Ponds	1 in Little Aso Pasture; 1 in Big Aso Pasture
New Trick Tank	1 New Trick Tank in South Pasture

\*This number can be adjusted based on actual season of use and current conditions, but would not exceed permitted AUMs.



## Partridge Creek Allotment Livestock Authorization Project Proposed Action

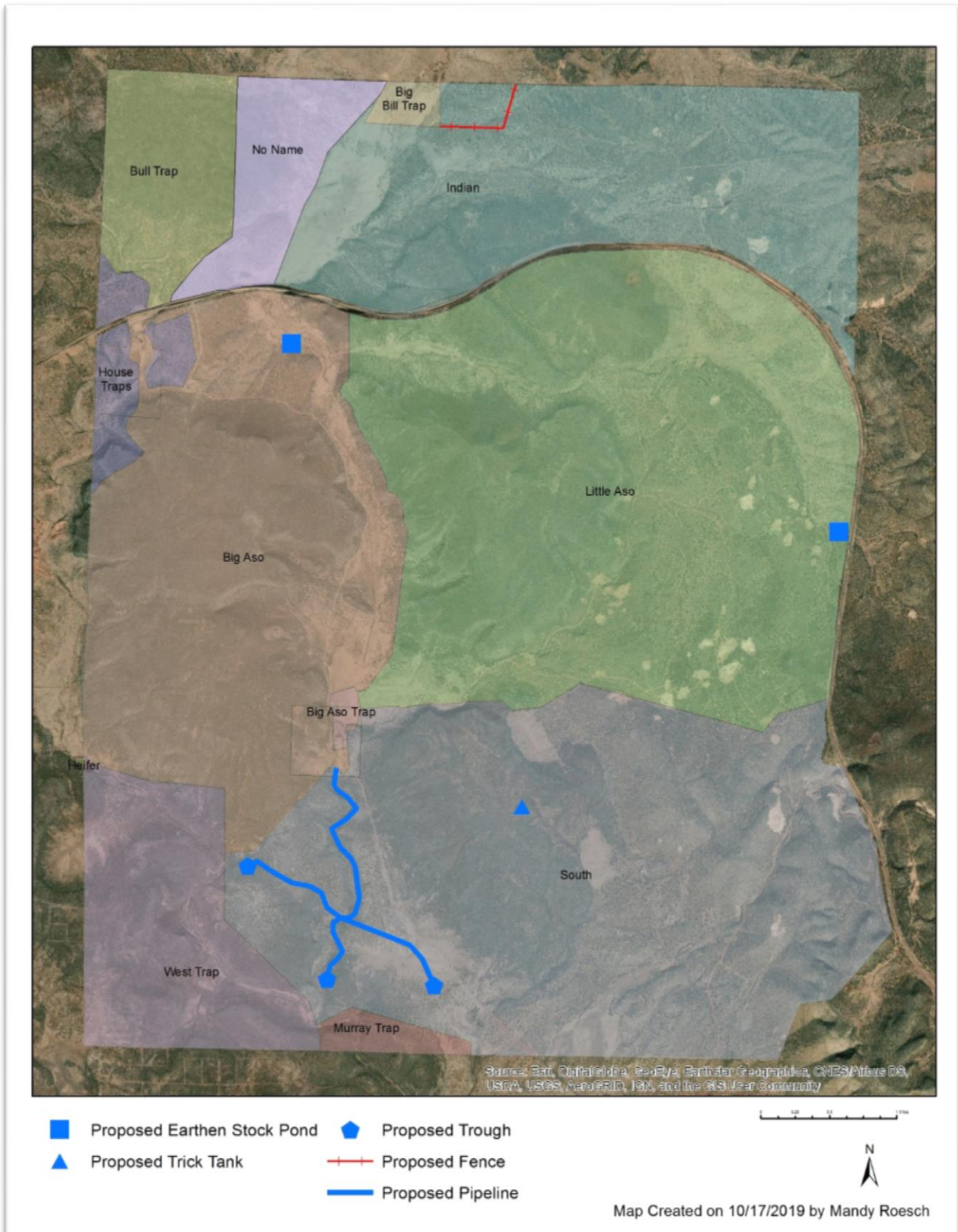


Figure 2: Map illustrating approximate locations of proposed structural improvements.

## Design Features and Mitigation Measures:

Applicable LRMP direction, best management practices, and Forest Service Manual and Handbook direction would be incorporated in project design and implementation. This includes conducting surveys for Forest Sensitive plants and culturally sensitive sites prior to construction of proposed structural improvements. Design features and mitigation measures applicable to this proposed action would be disclosed in the Environmental Assessment (EA).